



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

P4400-50
Job Sheet 169944



Part No: P4400-50

Job Qty: 2 ea

Part Name: Plasma® Long Line 4,400 lbs Safe Work Load (2,000 kg)



Part Weight: 0 lbs

Status: Scheduled

Priority: Medium

Job Created: 1/4/18

Job Tracking No:

Due Date: 1/25/18

Created By: Chantal Lavoie

Type: Stock

Description:

Note: DWG P###-## Rev 1(TEO17-741) IPP Rev A 17.11.13 New issue DP Verify DD

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup hrs	Run Hrs	Workcenter / Supplier	Lead Time	
110	Purchasing	2 pcs		1/25/18	0.00	0.00	Purchasing		
120	Packaging	2 pcs		1/25/18	0.00	0.00	Packaging2		
130	QC	2 pcs		1/24/18	0.00	0.00	QC6		
131	Small Fab	2 pcs		1/25/18	0.00	2.00	Small Fab-3		
140	Packaging	2 pcs		1/25/18	0.00	0.00	Packaging3		
150	QC21-FG	2 Ea		1/25/18	0.00	0.00	QC21		

Part Op 110 - Issue P/O to Tulmar; P/O 038417 - Manufacture as per DWG P4400-50 - Certificate of Conformity is required

Descriptions: required
131 - 1-Engrave 1632T22 tags as per DWG sheet 7. 2-Attach first tag using 90177A218 ring to zipper on -39 bag, place second tag in front pocket of -39 bag. 3-Pack bag.

Fg sold

MAR 15 2018

Job BOM

Part / Item	Component Name	Quantity	Operation	Container
P4400-50P	Plasma® Long Line 4,400 lbs Safe Work Load (2,000 kg)	2 pcs (1 ea)	110-Purchasing	
1632T22	Aluminum Tag 1" X 2" X 0.04"	4 pcs (2 ea)	131-Small Fab	
600.1327P	Long Line Carry Bag	2 pcs (1 ea)	131-Small Fab	
90177A218	Split Ring	4 Ea (2 ea)	131-Small Fab	

Job Allocations

Operation	Component Part	Required	Inventory	Allocated
110-Purchasing	P4400-50P	2	0	0
131-Small Fab	1632T22	4	95	0
	600.1327P	2	33	0
	90177A218	4	98	0

Part Specifications

Specifications could not be found.



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

P4400-50

Job Sheet 169944



Part No: P4400-50

Job Qty: 2 ea

Part Name: Plasma® Long Line 4,400 lbs Safe Work Load (2,000 kg)



Part Weight: 0 lbs

Status: Scheduled

Priority: Medium

Job Created: 1/4/18

Job Tracking No:

Due Date: 1/25/18

Created By: Chantal Lavoie

Type: Stock

Description:

Customer: Eagle Copters South America (CEAGL01)

Aerodrome De Chicureo, Camino Guay-Guay #8881 Colina, Santiago, , 9340000 Chile ph:+56 22 948 3200
fx:+56 2 2247 8290.

Note: DWG P####-## Rev 1(TEO17-741) IPP Rev A 17.11.13 New issue DP Verify DD

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup hrs	Run Hrs	Workcenter / Supplier	Lead Time	
110	Purchasing	2 pcs		1/25/18	0.00	0.00	Purchasing		At 18/03/18
120	Packaging	2 pcs		1/25/18	0.00	0.00	Packaging2		At 18/03/18
130	QC	2 pcs		1/25/18	0.00	0.00	QC6		11 MAR 18 2018
140	Packaging	2 pcs		1/25/18	0.00	0.00	Packaging3		9-89
150	QC21-SA	2 Ea		1/25/18	0.00	0.00	QC21		

Part Op 110 - -Issue P/O to Tulmar; P/O 38417 -Manufacture as per DWG P4400-50 -Certificate of Conformity is
Descriptions: required

JAN 09 2018

DAS
13
9-89

Job Allocations

Operation	Component Part	Required	Inventory	Allocated	Std Qty
110-Purchasing	P4400-50P	2	0	0	0

Part Specifications

Specifications could not be found.

Plex 1/4/18 8:19 AM dart.lavoie.chantal



Plasma® Long Line 4,400 lbs Safe Work Load (2,000 kg)

PART NO: P4400-50

Serial No/Batch: S044094

Revision:

Operation:

Change No:

Packaging

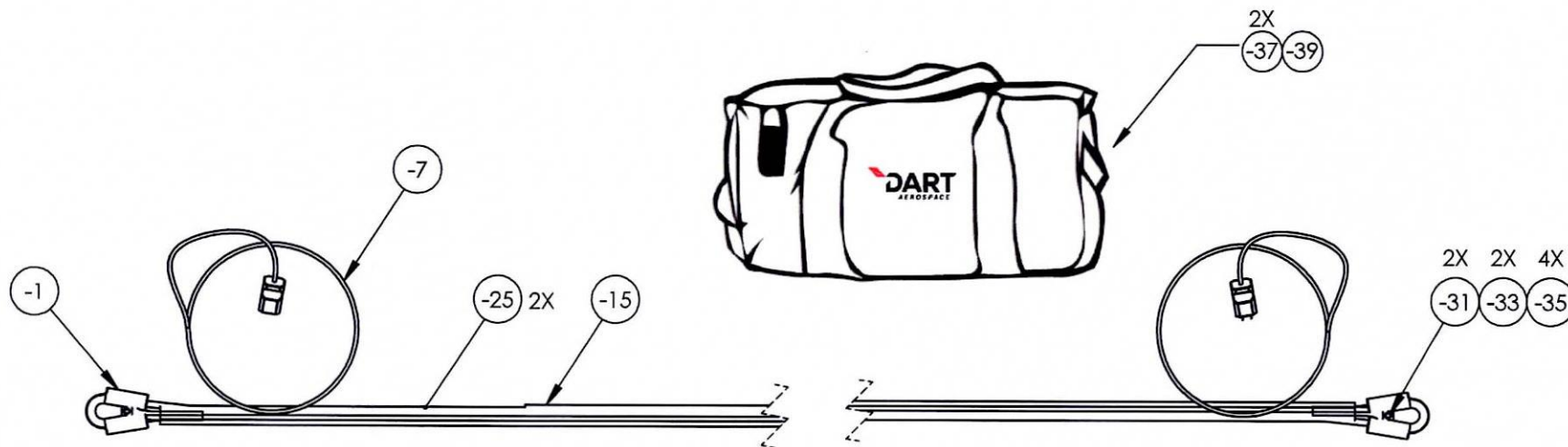
Mfg Date: 02/21/18

Job No: 169944

This drawing, specifications, and concepts contained here in are the sole property of Dart Aerospace, and may not be reproduced or used in any fashion without the prior written permission of Dart Aerospace Eugene, OR.

REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
1		RELEASED FOR PRODUCTION.	5/5/2017	SM	JAG

TEO ATTACHED



ASSY QTY	ASSY QTY	ASSY QTY	ASSY QTY	B/O	Part #	UNIT QTY	Description	Material	B/O INFORMATION OR SPECIFICATIONS	PG.
			X		-1	1	LINE/THIMBLE ASSEMBLY			2
			1	B/O	-3		ROPE		SEE TABLE 1, MODIFIED	2
			2	B/O	-5		THIMBLE	STEEL	SEE TABLE 1, MODIFIED	3
			2	B/O	-6		EPOXY	EPOXY	(SMOOTH CAST 45D)	2
		X			-7	1	WIRE ASSEMBLY			4
		1		B/O	-9		WIRE		14/3 SJTOW, MODIFIED	4
		1		B/O	-11		3-PRONG MALE SPADE PLUG	EL-PLUG-M	(PASS & SEYMOUR # PS5965Y)	4
		1		B/O	-13		3-PRONG FEMALE SPADE PLUG	EL-PLUG-F	(PASS & SEYMOUR # PS5969Y)	4
	X				-15	1	JACKET		SEE TABLE 2	5
	1			B/O	-17		WEBBING		SEE TABLE 2	5
	1			B/O	-19		1" VELCRO	NYLON	1" HOOK FASTENING TAPE (J. ENNIS FABRICS # VELSE9004)	5
	1			B/O	-21		1" VELCRO	NYLON	1" LOOP FASTENING TAPE (J. ENNIS FABRICS # VELSE9005)	5
1	1			B/O	-23		2" VELCRO	NYLON	2" HOOK FASTENING TAPE (J. ENNIS FABRICS # VELSE9006)	5.6
X				B/O	-25	2	END RETURN		SEE TABLE 3	6
1				B/O	-27		WEBBING		TOP GUN MATERIAL, MEDIUM BLUE	6
1				B/O	-29		2" VELCRO	NYLON	2" LOOP FASTENING TAPE (J. ENNIS FABRICS # VELSE9007)	6
				B/O	-31	2	BOLT	STEEL	AN3-10A	1
				B/O	-33	2	NUT	STEEL	MS21044-N3	1
				B/O	-35	4	WASHER	STEEL	AN960-10	1
					-37	2	TAG		PAPER	7
				B/O	-39	1	BAG		DART AEROSPACE BAG (600.1327)	1
ASSY -25	ASSY -15	ASSY -7	ASSY -1							

NOTE:

1. CONSULT LONG LINE ASSEMBLY MANUAL FOR PRODUCT ASSEMBLY.



LONG LINE

DWG NO.		P###-##		REV	1
MATERIAL		UNLESS OTHERWISE SPECIFIED		DIMENSIONS ARE IN INCHES	
TREAT		.XXX ± .005		FRACTIONS ± 1/8	
FINISH		.XX ± .01		ANGLES ± 5°	
SPEC		.X ± .1		SURFACES = 125	
DRAWN BY:		SM 05/05/2017		1. BREAK ALL SHARP EDGES	
CHECKED:		DD 05/08/2017		.015 x 45° OR .015R	
OPPS APPR:		AA 05/10/2017		2. DIMENSIONAL LIMITS APPLY	
QA APPR:		JL 05/10/2017		AFTER PLATING	
APPROVED:		JAG 05/17/2017		3. INTERPRET DIM AND TOL PER	
SCALE		1:12		ASME Y14.5M-2009	
DATE		5/5/2017		USED ON MODEL	
SHEET		1 OF 7			

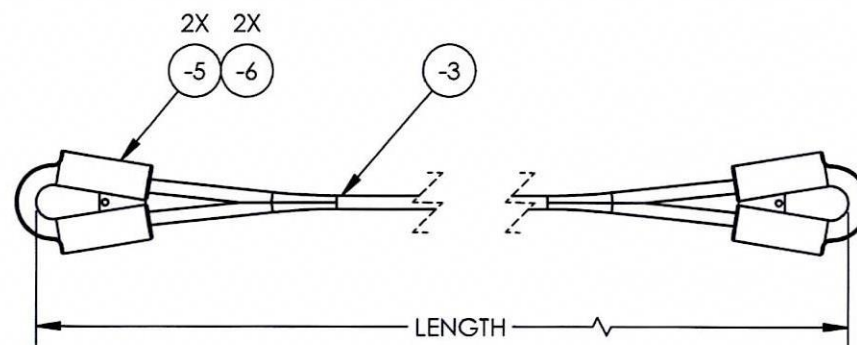
This drawing, specifications, and concepts contained here in are the sole property of Dart Aerospace, and may not be reproduced or used in any fashion without the prior written permission of Dart Aerospace Eugene, OR.

REVISIONS			
REV	ECR	DESCRIPTION	DATE

TEO ATTACHED

TABLE 1

P####	-## (LENGTH FT.)	-3 (ROPE)	-5 (THIMBLE)
2500	50	3/8" PLASMA® 12 STRAND	G715PC
	100		
	150		
	200		
	CUSTOM		
3000	50	7/16" PLASMA® 12 STRAND	
	100		
	150		
	200		
	CUSTOM		
4400	50	1/2" PLASMA® 12 STRAND	G719PC
	100		
	150		
	200		
	CUSTOM		
5400	50	9/16" PLASMA® 12 STRAND	
	100		
	150		
	200		
	CUSTOM		
7300	50	5/8" PLASMA® 12 STRAND	G725PC
	100		
	150		
	200		
	CUSTOM		
9700	50	3/4" PLASMA® 12 STRAND	
	100		
	150		
	200		
	CUSTOM		
13200	50	7/8" PLASMA® 12 STRAND	G735PC
	100		
	150		
	200		
	CUSTOM		
15700	50	1" PLASMA® 12 STRAND	G745PC
	100		
	150		
	200		
	CUSTOM		



NOTE:

1. CUT AND SPLICE ROPE WITH THIMBLES IN ACCORDANCE WITH THE LONG LINE ASSEMBLY MANUAL AND CUT LENGTH CALCULATOR.

DART AEROSPACE	
TITLE LONG LINE	
DWG NO. P####-##-1	REV 1
MAT'L HEAT TREAT FINISH SPEC	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES .XXX ± .010 FRACTIONS ± 1/8 .XX ± .03 ANGLES ±1° .X ± .1 SURFACES = 125°	
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R	
2. DIMENSIONAL LIMITS APPLY AFTER PLATING	
3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009	
USED ON MODEL	
DRAWN BY: SM 05/05/2017	QA APPR: JL 05/10/2017
CHECKED: DD 05/08/2017	APPROVED: JAG 05/17/2017
OPPS APPR: AA 05/10/2017	
SCALE 1:6	DATE 5/5/2017
SHEET 2 OF 7	

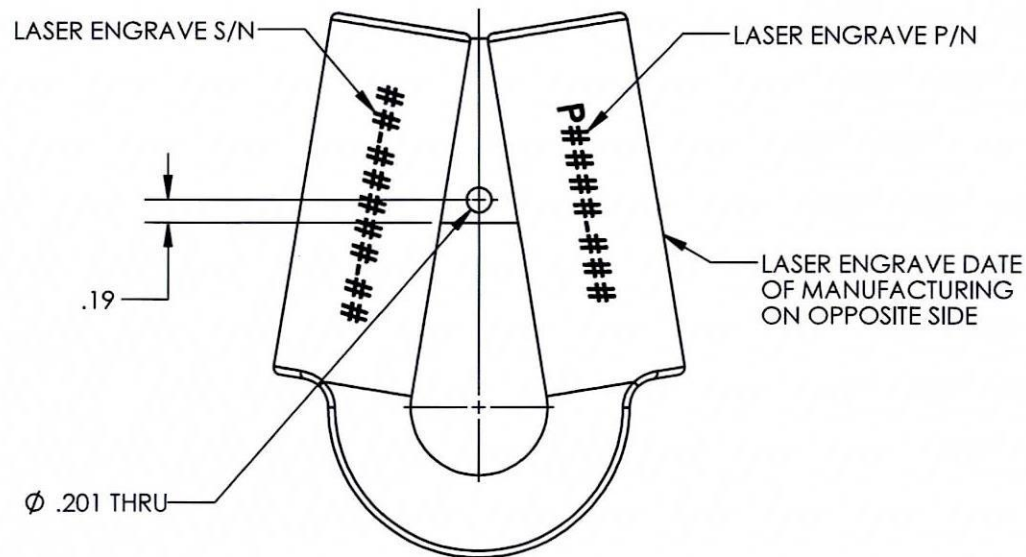
(-1)

LINE/THIMBLE ASSEMBLY

This drawing, specifications, and concepts contained here in are the sole property of Dart Aerospace, and may not be reproduced or used in any fashion without the prior written permission of Dart Aerospace Eugene, OR.

REVISIONS				
REV	ECR	DESCRIPTION	DATE	INITIAL
				APPROVED

TEO ATTACHED



NOTE:

1. USE THIMBLE REFERENCED TO IN TABLE 1.

DART AEROSPACE	
TITLE LONG LINE	
DWG NO. P####-##-5	REV 1
MAT'L STEEL HEAT TREAT FINISH GRAY POWDERCOAT SPEC	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES .XXX ± .010 FRACTIONS ± 1/8 .XX ± .03 ANGLES ± 1° .X ± .1 SURFACES = 125/✓	
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING 3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009	
DRAWN BY: SM 05/05/2017 CHECKED: DD 05/08/2017 OPPTS APPR: AA 05/10/2017 QA APPR: JL 05/10/2017 APPROVED: JAG 05/17/2017	
SCALE 2:3	DATE 5/5/2017
SHEET 3 OF 7	

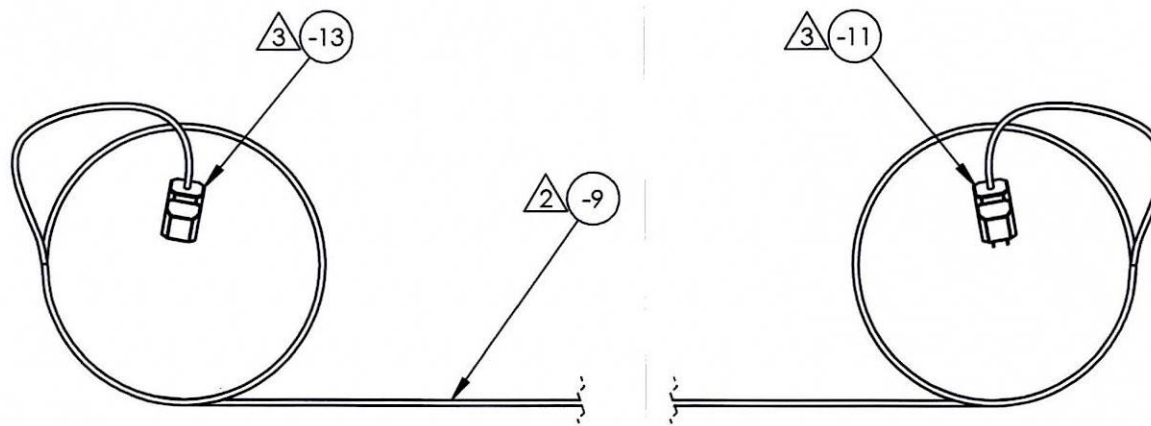
(-5)

THIMBLE

This drawing, specifications, and concepts contained here in are the sole property of Dart Aerospace, and may not be reproduced or used in any fashion without the prior written permission of Dart Aerospace Eugene, OR.

REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED

TEO ATTACHED



NOTES:

1. WIRING REQUIREMENTS MAY VARY UPON CUSTOMER REQUEST.
2. DETERMINE OVERALL WIRE LENGTH USING LONG LINE ASSEMBLY MANUAL.
3. SPLICE WIRE ENDS IN ACCORDANCE WITH LONG LINE ASSEMBLY MANUAL.



TITLE		LONG LINE	
DWG NO.		P####-##-7	
REV		1	
MATERIAL		UNLESS OTHERWISE SPECIFIED	
FINISH		DIMENSIONS ARE IN INCHES	
SPEC		.XXX ± .010 FRACTIONS ± 1/8	
DRAWN BY: SM 05/05/2017		.XX ± .03 ANGLES ± 1°	
CHECKED: DD 05/08/2017		.X ± .1 SURFACES = 125°	
OPPS APPR: AA 05/10/2017		1. BREAK ALL SHARP EDGES	
QA APPR: JL 05/10/2017		.015 x 45° OR .015R	
APPROVED: JAG 05/17/2017		2. DIMENSIONAL LIMITS APPLY AFTER PLATING	
SCALE 1:8		3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009	
DATE 5/5/2017		USED ON MODEL	
SHEET 4 OF 7			

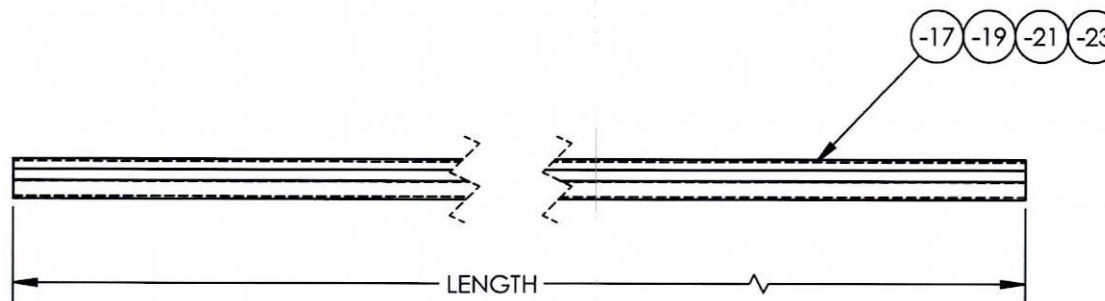
-7

WIRE ASSEMBLY

This drawing, specifications, and concepts contained here in are the sole property of Dart Aerospace, and may not be reproduced or used in any fashion without the prior written permission of Dart Aerospace Eugene, OR.

REVISIONS							
REV	ECR	DESCRIPTION			DATE	INITIAL	APPROVED

TEO ATTACHED



NOTES:

1. PROVIDE -17, -19, & -21 MATERIALS TO VENDOR.
2. CONSULT LONG LINE ASSEMBLY MANUAL FOR JACKET LENGTH.

TABLE 2

TABLE 2		
LONG LINE	-17 MATERIAL WIDTH	LENGTH
P2500-##	MURDOCK WEBBING CO. INC 4 1/8" SINGLE-WALLED TUBULAR WEB ORANGE	SEE NOTE 2
P3000-##		
P4400-##		
P5400-##		
P7300-##	MURDOCK WEBBING CO. INC 5 1/8" SINGLE-WALLED TUBULAR WEB ORANGE	
P9700-##		
P13200-##		
P15700-##	MURDOCK WEBBING CO. INC 6 1/8" SINGLE-WALLED TUBULAR WEB ORANGE	

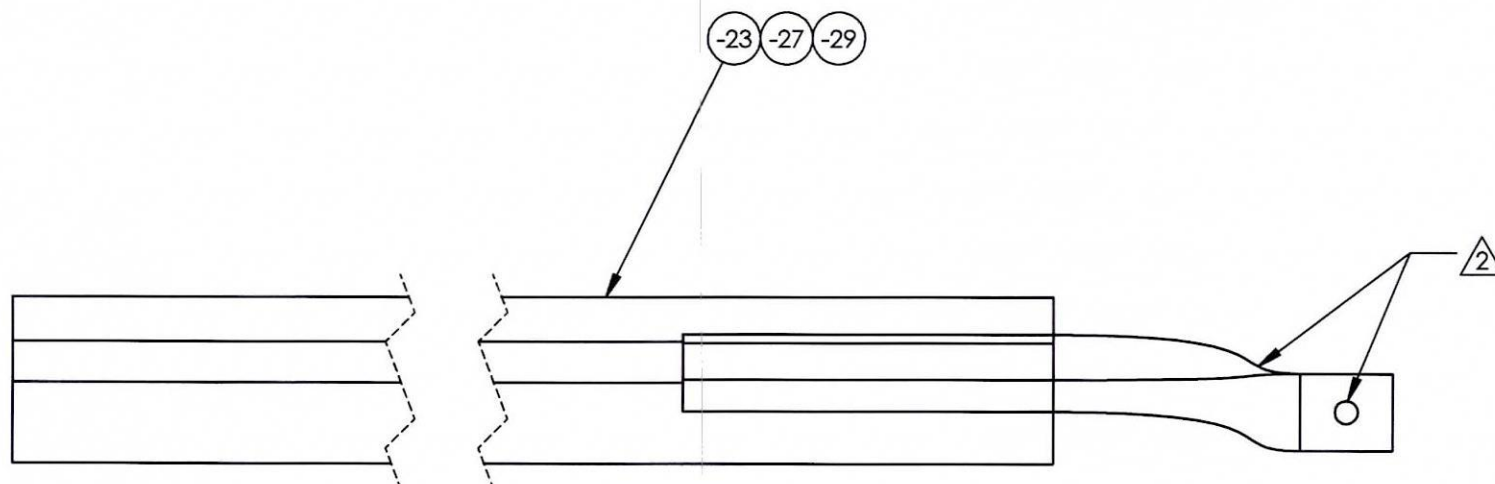
-15
JACKET

DART AEROSPACE																			
TITLE LONG LINE																			
DWG NO. P####-##-15	REV 1																		
<table border="1"> <tr> <td>MAT'L</td> <td>UNLESS OTHERWISE SPECIFIED</td> </tr> <tr> <td>HEAT</td> <td>DIMENSIONS ARE IN INCHES</td> </tr> <tr> <td>TREAT</td> <td>.XXX ± .010 FRACTIONS ± 1/8</td> </tr> <tr> <td>FINISH</td> <td>XX ± .03 ANGLES ± 1°</td> </tr> <tr> <td>SPEC</td> <td>X ± .1 SURFACES = 125/</td> </tr> </table>		MAT'L	UNLESS OTHERWISE SPECIFIED	HEAT	DIMENSIONS ARE IN INCHES	TREAT	.XXX ± .010 FRACTIONS ± 1/8	FINISH	XX ± .03 ANGLES ± 1°	SPEC	X ± .1 SURFACES = 125/								
MAT'L	UNLESS OTHERWISE SPECIFIED																		
HEAT	DIMENSIONS ARE IN INCHES																		
TREAT	.XXX ± .010 FRACTIONS ± 1/8																		
FINISH	XX ± .03 ANGLES ± 1°																		
SPEC	X ± .1 SURFACES = 125/																		
<table border="1"> <tr> <td>DRAWN BY:</td> <td>SM 05/05/2017</td> <td rowspan="4"> 1. BREAK ALL SHARP EDGES .015 x 45° OR .015R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING 3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009 USED ON MODEL </td> </tr> <tr> <td>CHECKED:</td> <td>DD 05/08/2017</td> </tr> <tr> <td>OPPS APPR:</td> <td>AA 05/10/2017</td> </tr> <tr> <td>QA APPR:</td> <td>JL 05/10/2017</td> </tr> <tr> <td colspan="2">APPROVED: JAG 05/17/2017</td> <td></td> </tr> <tr> <td>SCALE</td> <td>1:4</td> <td>DATE 5/5/2017</td> </tr> <tr> <td colspan="2"></td> <td>SHEET 5 OF 7</td> </tr> </table>		DRAWN BY:	SM 05/05/2017	1. BREAK ALL SHARP EDGES .015 x 45° OR .015R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING 3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009 USED ON MODEL	CHECKED:	DD 05/08/2017	OPPS APPR:	AA 05/10/2017	QA APPR:	JL 05/10/2017	APPROVED: JAG 05/17/2017			SCALE	1:4	DATE 5/5/2017			SHEET 5 OF 7
DRAWN BY:	SM 05/05/2017	1. BREAK ALL SHARP EDGES .015 x 45° OR .015R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING 3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009 USED ON MODEL																	
CHECKED:	DD 05/08/2017																		
OPPS APPR:	AA 05/10/2017																		
QA APPR:	JL 05/10/2017																		
APPROVED: JAG 05/17/2017																			
SCALE	1:4	DATE 5/5/2017																	
		SHEET 5 OF 7																	

This drawing, specifications, and concepts contained here in are the sole property of Dart Aerospace, and may not be reproduced or used in any fashion without the prior written permission of Dart Aerospace Eugene, OR.

REVISIONS						
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED	

TEO ATTACHED



NOTES:

1. PROVIDE MATERIALS -23, -27, & -29 TO VENDOR.
2. WEBBING AND EYELETS NOT PROVIDED

TABLE 3

LONG LINE	END RETURN
P2500-##	ER-3044
P3000-##	ER-3044-1
P4400-##	ER-5473
P5400-##	
P7300-##	
P9700-##	ER-9713
P13200-##	
P15700-##	ER-15002

-25

END RETURN

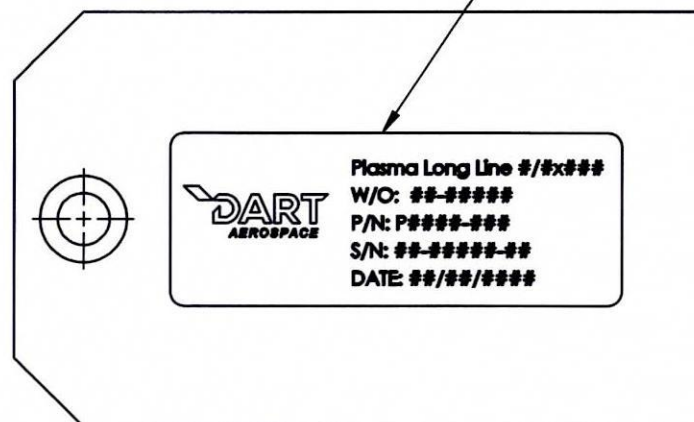
DART AEROSPACE	
TITLE LONG LINE	
DWG NO. P####-##-25	REV 1
MAT'L REAT TREAT FINISH SPEC	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES .XXX ± .010 FRACTIONS ± 1/8 .XX ± .03 ANGLES ± 1° X ± .1 SURFACES = 125/✓ 1. BREAK ALL SHARP EDGES .015 x 45° OR .015R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING 3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009	
DRAWN BY: SM 05/05/2017	USED ON MODEL
CHECKED: DD 05/08/2017	
OPPS APPR: AA 05/10/2017	
QA APPR: JL 05/10/2017	
APPROVED: JAG 05/17/2017	
SCALE 2:3	DATE 5/5/2017
SHEET 6 OF 7	

This drawing, specifications, and concepts contained here in are the sole property of Dart Aerospace, and may not be reproduced or used in any fashion without the prior written permission of Dart Aerospace Eugene, OR.

REVISIONS				
REV	ECR	DESCRIPTION	DATE	INITIAL
				APPROVED

TEO ATTACHED

PRINT:
 PLASMA LONG LINE (ROPE DIAMETER (IN.))X(LENGTH (FT.))
 W/O: ##-####
 P/N: P####-###
 S/N: ##-####-##
 DATE: ##/##/####



NOTE:
 1. ATTACH FIRST TAG TO ZIPPER ON -39, PLACE SECOND TAG IN FRONT POCKET ON -39.

(-37)

TAG

DART AEROSPACE	
TITLE LONG LINE	
DWG NO. P####-##-37	REV 1
MAT'L _____ HEAT _____ TREAT _____ FINISH _____ SPEC _____	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES .XXX ± .010 FRACTIONS ± 1/8 .XX ± .03 ANGLES ± 1° .X ± .1 SURFACES = 125/✓	
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R	
2. DIMENSIONAL LIMITS APPLY AFTER PLATING	
3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009	
USED ON MODEL	
DRAWN BY: SM 05/05/2017 CHECKED: DD 05/08/2017 OPFS APPR: AA 05/10/2017 QA APPR: JL 05/10/2017 APPROVED: JAG 05/17/2017	
SCALE 3:4	DATE 5/5/2017
SHEET 7 OF 7	

**ENGINEERING ORDER # TEO17-741**

SCALE: NTS

SHEET 1 OF 1

DRAWING NO. P###-##

REV: 1

EFF.: NEXT ORDER

CHANGE CATEGORY

TITLE: LONG LINE

☒ MAJOR ☐ MINOR

DATE 17.11.08

APPROVED: WM 11/14/2017

MFG. APPR.: DD 11/14/2017

CHECKED: WM 11/14/2017

DRAWN: VM 11/09/2017

TRANSACTION CODE (TC):

A-ADD C-CREATE
R-REVISE D-DELETE

REASON: UPDATE TO DRAWING CALLOUTS FOR NEW SUPPLIER OF LONG LINES

COPYRIGHT © 2017 BY DART AEROSPACE LTD

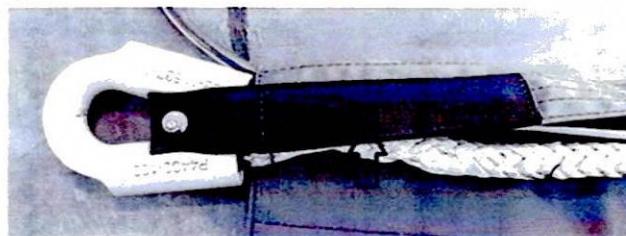
THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE
USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION
FROM DART AEROSPACE LTD

1) JACKET MUST BE MADE WITH REFERENCE TO DRAWING P###-## REV 1, LONG LINE ASSEMBLY MANUAL AND SAMPLE PROVIDED TO TULMAR WITH P/N P5400-50 S/N AC09006

2) ACCEPTABLE TO USE EL-PLUG-M (PASS & SEYMOUR #PS5965Y) OR McMaster PLUG #7216K5
ACCEPTABLE TO USE EL-PLUG-F (PASS & SEYMOUR #PS5969Y) OR McMaster PLUG #7216K6

3) ACCEPTABLE TO USE SJEOOW OR SJTOW ELECTRICAL WIRE

4) LASER ENGRAVE S/N AND P/N ON THIMBLE IS OPTIONAL

5) IDENTIFICATION WITH SEWN ON LABEL AT LOCATION SHOWN TO INCLUDE: "Dart Aerospace Ltd. P/N: P###-##, S/N: XX-XXXX-XX, MANUFACTURE DATE: MM/DD/YYYY",
WHERE THE P###-## WILL BE DEPENDENT ON THE MODEL ORDERED PER DRAWING6) SELECTED COVER TO EXTEND THROUGH THIMBLE ENDS TO PREVENT ABRASION OF ROPE BY THIMBLE. THEY MUST BE THE SAME ON BOTH ENDS OF THE LONG LINE
ACCEPTABLE TO USE ONE OF: SLEEVE-DB-TEXSXX
WEARPADXX7) INSPECT CONDITION OF ROPE AT THE END OF THE ROPE RETURN AND THIMBLES. FRAYING OR DAMAGE TO ROPE IS NOT ACCEPTABLE. INSPECT JACKETS AND COVER. SEWING
TO BE CONTINUOUS AND WITH NO LOOSE THREADS. NO DAMAGE TO THE JACKETS IS ACCEPTABLE. ELECTRICAL CABLE MUST BE FREE OF DAMAGE OR NICKS TO THE INSULATION
WHERE VISIBLE (FULL INSPECTION OF WIRE IS NOT REQUIRED). ELECTRICAL CONNECTORS MUST BE SECURELY INSTALLED. PERFORM CONTINUITY CHECK TO ENSURE
THERE IS NO SHORT AND THAT CABLES ARE CONNECTED PROPERLY.

8) ACCEPTABLE TO USE Plasma® 12 STRAND ROPE OR Dyneema® SupreemX-12™ ROPE

9) PART MUST BE RECEIVED WITH CERTIFICATE OF CONFORMITY FROM TULMAR

10) IT IS ACCEPTABLE TO BUILD THE LONG LINE P###-## UTILIZING COMMON MANUFACTURING PRACTICES FROM Atlantic Braids AND Tulmar.
DART ASSEMBLY MANUAL IS FOR REFERENCE ONLY

11) ELECTRICAL WIRE LENGTH TO EXTEND 6' PAST THE BASE OF THE THIMBLE ON BOTH ENDS

12) JACKET LENGTH TO COVER THE ROPE UP TO AND INCLUDING THE END RETURN TAPER ON BOTH ENDS. JACKET LENGTH WILL BE DEPENDENT ON MODEL LENGTH

DOCUMENTS EFFECTED: ☐ PATTERN ☐ INSTALL INSTRUCTIONS ☒ BOM



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER

PO038417

Supplier: TUL001-VC
Tulmar Safety Systems
1123 Cameron St
Hawkesbury
ON
K6A 2B8 Canada
Phone: 613 632 1282
Fax: 613 632 2030

PO No: PO038417

PO Date: 11/20/17

Due Date: 2/5/18

Purchase Order

Revision:

Revision Date: 1/24/18

Ship-To Contact: Baker, Diane
Phone: dbaker@dartaero.com

RECEIVED
\$

Ship To: 1270 Aberdeen Street
Hawkesbury
ON
K6A 1K7 Canada
Phone: 613-632-5200

Via: Ground

Pynt Terms: Net 30

Freight Terms:

Special Comments:

E-MAILED

Items

Line Item	Part	Supplier Part No	Item No	Description	Status	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
2	P3000-100P			Plasma® Long Line 3,000 lbs Safe Work Load (1,350 kg) As per dwg P3000-100 Rev. 1	Firmed	2/23/18	1 Ea	0 Ea	1 Ea	\$1,495.00/Ea	\$1,495.00
Line Item Note B168559											
3	P3000-150P			Plasma® Long Line -Manufacture as per DWG P3000-150 Rev 1	Firmed	2/5/18	2 Ea	0 Ea	2 Ea	\$2,035.00/Ea	\$4,070.00
Line Item Note B168558											
4	P3000-50P			Plasma® Long Line 3,000 lbs Safe Work Load (1,350 kg) As per Dwg P3000-50 Rev. 1	Firmed	2/5/18	8 pcs	0 pcs	8 pcs	\$960.00/pcs	\$7,680.00
Line Item Note B168560											
5	P4400-100P			Plasma® Long Line 4,400 lbs Safe Work Load (2,000 kg) As Per Dwg P4400-100 Rev. 1	Firmed	2/23/18	1 Ea	0 Ea	1 Ea	\$1,705.00/Ea	\$1,705.00
Line Item Note B168561											
6	P4400-150P			Plasma® Long Line 4,400 lbs Safe Work Load (2,000 kg) As per Dwg P4400-150 Rev. 1	Firmed	2/5/18	1 pcs	0 pcs	1 pcs	\$2,340.00/pcs	\$2,340.00
Line Item Note B168562											
7	P4400-50P			Plasma® Long Line 4,400 lbs Safe Work Load (2,000 kg) As Per Dwg P4400-50 Rev. 1	Partial	2/5/18	2 pcs	2 pcs	0 pcs	\$1,070.00/pcs	\$0.00
Line Item Note B168563											

Items											
Line Item	Part	Supplier Part No	Item No	Description	Status	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
					Firmed	2/23/18	2 pcs	0 pcs	2 pcs	\$1,070.00/pcs	\$2,140.00
					Sub Total:		4	2	2		\$2,140.00
8	P5400-50P			Plasma® Long Line 5,400 lbs Safe Work Load (2,500 kg) AS Per Dwg P5400-50 Rev. 1	Firmed	2/5/18	1 pcs	0 pcs	1 pcs	\$1,185.00/pcs	\$1,185.00
Line Item Note B168564											
10	P4400-25P			Plasma® Long Line 4,400 lb Safe Work Load (2,000 Kg) sales quote: 19062	Firmed	3/5/18	1 Ea	0 Ea	1 Ea	\$701.80/Ea	\$701.80
Line Item Note B170066											
11	P4400-50P			Plasma® Long Line 4,400 lbs Safe Work Load (2,000 kg) As Per Dwg P4400-50 Rev. 1	Firmed	2/5/18	2 pcs	0 pcs	2 pcs	\$1,070.00/pcs	\$2,140.00
							2x		AT 18/04/21		
Line Item Note B169944											
12	P3000-50P			Plasma® Long Line 3,000 lbs Safe Work Load (1,350 kg) As per Dwg P3000-50 Rev. 1	Firmed	2/5/18	2 pcs	0 pcs	2 pcs	\$960.00/pcs	\$1,920.00
Line Item Note B169943											
13	P3000-25P			Plasma® Long Line 3,000 lbs Safe Work Load (1,350 kg) As Per Dwg P3000-25	Firmed	2/22/18	1 pcs	0 pcs	1 pcs	\$725.00/pcs	\$725.00
							1x		AT 18/04/21		
Line Item Note job # 169697											
										Grand Total: \$26,101.80	
Order Notes											
Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit www.dartaerospace.com for further explanation. Procurement Quality Clauses A005 RIGHT OF ENTRY A007 FIRST ARTICLE INSPECTION (FAI) BY SELLER, (DOCUMENTATION MAINTAINED BY SUPPLIER) A012 CHEMICAL AND PHYSICAL TEST REPORTS A016 PERSONNEL QUALIFICATION A017 RAW MATERIAL IDENTIFICATION (AS APPLICABLE) A026 CERTIFICATION OF MATERIAL CONFORMANCE A041 QUALITY MANAGEMENT SYSTEM A042 DART NOTIFICATION BY SUPPLIER A043 RETENTION OF QUALITY DOCUMENT A048 COUNTERFEIT PARTS AVOIDANCE, DETECTION, MITIGATION AND DISPOSITION PROGRAM A049 SUPPLIER AWARENESS											

DAS
11
9-89

Plex 2/15/18 8:23 AM dart.lavoie.chantal

PACKING SLIP

Packing Slip No **62669** Page **1**

Ship Date
2/20/2018

TULMAR
Tulmar Safety Systems Inc.
1123 Cameron Street
Hawkesbury, ON K6A 2B8
Tel: 613-632-1282
Fax: 613-632-2030
GST R12475223
MID: XOTULSAF1123HAW
email: info@tulmar.ca
B.I.T.

Ship To:

Dart Aerospace
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Canada

Dart Aerospace
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Canada

Order number 35465	Sales order date 11/21/2017	Account number CDART100	Loc H	Account manager Francine Bigras
PO number P0038417	Ship via P.O. Up	Shipping Terms		
Item No. Description	Quantity ordered	UOM	Qty Shipped/Returned	Quantity on back order
REV 1 Proton update Dec 13/17 S 307-001 Long Line, 100ft, 1/2" Plasma Drawing No: P4400-100 - TEC1 - 11 DWG Rev: 1 S 43749 RUSH TULMAR TRUCK	1.00	EA	1.00	
Lot no.: BATCH0000000002	1.00			
87307-003 Long Line, 50ft, 1/2" Plasma Drawing No: P4400-50 - TEC1 - 11 DWG Rev: 1 S 43751 RUSH	2.00	EA	2.00	
Lot no.: BATCH0000000001	2.00			

Certificate of Conformance

☐ See Certification Enclosed

I hereby certify that the items listed here on have been inspected and, as tested (if applicable), conform to all specifications and requirements detailed in the contract or purchase order. Objective evidence to support this statement is on file and can be made available upon request.
If any specifications concerns please contact QAManager at 613-632-1282 ext 225

Authorized Inspector

Date

Feb 20/18

PACKING SLIP

TULMAR

Tulmar Safety Systems Inc.
1123 Cameron Street
Hawkesbury, ON K6A 2B8
Tel: 613-632-1282
Fax: 613-632-2030
GST R132478223
MID : XOTULSAF1123HAW
email: info@tulmar.com

Packing Slip No Page

62852 1

Ship Date
3/12/2018

Bill To:

Dart Aerospace
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Canada

Ship To:

Dart Aerospace
1270 Aberdeen Street
ATT: Rob Aboud
TEL: 613-632-5200 Ext 244
Hawkesbury, ON K6A 1K7
Canada

Order number	Sales order date	Account number	Loc	Account manager
35761	2/26/2018	CDART100	H	Francine Bigras
PO number	Ship via	Shipping Terms		
RMA 18-015	Pick-Up	FOB HAWKESBURY		
Item No. Description	Quantity ordered	UOM	Qty Shipped/Returned	Quantity on back order
R&O MISC Misc R&O Item 87352-001: Long Line rework P4400-50	2.00	EA	2.00	
R&O MISC Misc R&O Item 87352-002: Long Line rework P4400-100	1.00	EA	1.00	

Certificate of Conformance

☐ See Certification Enclosed

I hereby certify that the items listed hereon have been inspected, and / or tested (as applicable), conform to all specifications and requirements detailed in the contract or purchase order. Objective evidence to support this statement is on file, and can be made available upon request.
If any questions or concerns, please contact QA Manager @ 613-632-1282 ext. 225.

Authorized Inspector

Date: _____

MAR - 2 2018